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### B. <u>In the Claims</u>;

Please cancel, without prejudice to Applicants' rights to pursue the claims in a continuation application, claims 1-20, and simultaneously, please add new claims 21-56 as follows (Please note that a separate clean copy of the new claims is included for the Examiner's convenience):

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21. (new) A host computer system for balancing a transmission load among a plurality of broadcast origination points in a digital broadcast transmission system for wireless delivery of digital content to a plurality of client computer systems, the system comprising:

a load balancing module for selecting one of the plurality of broadcast origination points for broadcasting content to at least one of the plurality of client computer systems; and

a host server programmed to receive one or more requests for content from at least one of the plurality of client computer systems, to retrieve the requested content, and to transmit the requested content to at least the selected one of the plurality of broadcast origination points.

#### 22. (new) The system of Claim 21, further comprising:

at least one router located between the host server and the plurality of broadcast origination points for receiving requested content from the host server and routing the requested content to at least the selected one of the plurality of broadcast origination points for broadcast to at least one of the plurality of client computer systems.

### 23. (new) The system of Claim 21, further comprising:

a communications link between the host server and the Internet for retrieving content requested by at least one of the plurality of client computer systems.

24. (new) A method for balancing a transmission load among a plurality of broadcast origination points in a digital broadcast transmission system for wireless delivery of digital content to a plurality of client computer systems, comprising:

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providing a host computer system that is in communication with the digital broadcast transmission system;

establishing a communication connection between the host computer system and one of the client computer systems;

receiving a request for content from said one of the plurality of client computer systems;

obtaining the requested content;

selecting one of the plurality of broadcast origination points;

transferring the requested content from the host computer system to the selected one of the plurality of broadcast origination points; and

causing a digital broadcast to be transmitted by the selected one of the plurality of broadcast origination points to said one of the plurality of client computer systems, said digital broadcast including at least the requested content.

25. (new) The method of claim 24 wherein:

said host computer system includes a host server and a router.

26. (new) The method of Claim 24 wherein:

said digital broadcast further includes at least one special action instruction.

27. (new) The method of Claim 24 further comprising:

including a vacate instruction in said digital broadcast that instructs one or more of the client computer systems to stop listening to one of the plurality of broadcast origination points and to identify a different one of the plurality of broadcast origination points to start listening to; and

receiving a routing information update from one of the client computer systems, said routing information update requesting future digital broadcasts from the identified different one of the plurality of broadcast origination points.

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### 28. (new) The method of Claim 27 further comprising:

updating a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the identified different one of the plurality of broadcast origination points.

## 29. (new) The method of Claim 24 wherein:

said digital broadcast further comprises a beacon signal that provides transmission characteristics for one or more of the broadcast origination points; and

said characteristics comprise bandwidth availability data for one or more of the digital broadcast origination points.

### 30. (new) The method of Claim 29 further comprising:

including a reported null packet count for one or more of said broadcast origination points in said bandwidth availability data; and

receiving a routing information update from one of the client computer systems, said routing information update requesting future digital broadcasts from one of the plurality of broadcast origination points having a higher reported null packet count than the selected one of the broadcast origination points.

### 31. (new) The method of Claim 30 further comprising:

updating a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the broadcast origination point having a higher reported null packet count than the selected one of the broadcast origination points.

### 32. (new) The method of Claim 29 wherein:

said beacon signal is encoded such that the beacon signal is intended to be read by only a subset of the client computer systems.

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#### 33. (new) The method of Claim 32 wherein:

the beacon signal is addressed for a subset of the plurality of client computer systems, at least one of which in the subset is positioned to receive transmissions from two or more broadcast origination points.

### 34. (new) The method of Claim 29, wherein:

said beacon signal includes a suggested broadcast origination point for at least one of the client computer systems.

### 35. (new) The method of claim 24 wherein:

said digital broadcast transmission comprises a digital television signal in compliance with an Advanced Television Standards Committee (ATSC) format and wherein the requested content is inserted in place of null packets in said ATSC formatted digital television signal.

#### 36. (new) The method of claim 24 wherein:

said communication connection between the host computer system and the client computer system comprises an IP virtual private networking connection.

### 37. (new) The method of claim 24 wherein:

at least one of the plurality of broadcast origination points comprises a selected one of a terrestrial digital television transmission station and a digital broadcast satellite transponder.

#### 38. (new) The method of claim 24 wherein:

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said plurality of broadcast origination points comprises a selected one of a plurality of channels on a single transmission station and a plurality of separate transmission stations.

### 39. (new) The method of claim 24 wherein:

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said host computer system is connected to said selected one of the plurality of broadcast origination points via a selected one of a wireless microwave transmission link and a wired transmission link.

40. (new) A method for selecting a broadcast origination point in a digital broadcast transmission system for wireless delivery of digital content to a client computer system, said digital broadcast system comprising a host computer system and a plurality of broadcast origination points, the method comprising:

establishing a communication connection between said client computer system and said host computer system;

transmitting a request for content to said host computer system;

providing the client computer system with a digital broadcast receiver;

receiving a digital broadcast transmitted by a selected one of the plurality of broadcast origination points at the digital broadcast receiver, said digital broadcast including at least the requested content; and

receiving a beacon signal from one of the plurality of broadcast originating points at the digital broadcast receiver, said beacon signal providing transmission characteristics of said plurality of broadcast origination points.

## 41. (new) The method of Claim 40 wherein:

said requested content is received from the Internet by the host computer system and forwarded to the selected one of said plurality of broadcast origination points.

# 42. (new) The method of Claim 40 further comprising:

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receiving at least one special action instruction in said digital broadcast; said at least one special action instruction comprising a vacate instruction that instructs one or more of the client computer systems to stop listening to one of the plurality of broadcast origination points and to identify a different one of the plurality of broadcast origination points to start listening to;

updating a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the identified broadcast origination point.

### 43. (new) The method of Claim 42 wherein:

said host computer system comprises a server and a router; and said step of updating a routing information record comprises transmitting a routing information update to a selected one of the server and the router.

#### 44. (new) The method of Claim 40 further comprising:

receiving bandwidth availability data for one or more of said digital broadcast origination points in said characteristics;

generating a routing information update, said routing information update requesting future digital broadcasts from an identified one of the plurality of broadcast origination points, the identity of which is selected based on the bandwidth availability data; and

transmitting the routing information update to the host computer system to update a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the identified broadcast origination point.

### 45. (new) The method of Claim 44 wherein:

said bandwidth availability data includes a reported null packet count for one or more of said broadcast origination points.

### 46. (new) The method of Claim 44 wherein:

said beacon signal is addressed to a subset of a client computer systems to limit the number of client computer systems that may change broadcast origination points at a given time.

### 47. (new) The method of Claim 40 further comprising:

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receiving at least one of error information and signal strength information for one or more of the digital broadcast origination points in said characteristics.

adjusting the digital broadcast receiver to receive a digital transmission from one or more of the plurality of digital broadcast origination points;

determining whether digital broadcast signals are being received at said digital broadcast receiver from a digital broadcast origination point for which at least one of (1) the received error information is below a first predetermined threshold and (2) the received signal strength information is above a second predetermined threshold; and

prompting a user of said client computer system to adjust a digital receiver antenna if digital broadcast signals are not being received from one or more digital broadcast origination points for which at least one of (1) the received error information is below a first predetermined threshold and (2) the received signal strength information is above a second predetermined threshold.

### 48. (new) The method of Claim 47 wherein:

said at least one of received error information and received signal strength information is collected by one or more client computer systems and transmitted to said host computer system for transmission to others of the plurality of client computer systems.

### 49. (new) The method of Claim 45, wherein:

said beacon signal includes a suggested broadcast origination point for at least one of said client computer systems to enable said at least one client computer system to select a new broadcast origination point without receiving a beacon signal from said selected one of the plurality of broadcast origination points.

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50. (new) A method for provisioning bandwidth to dynamically and automatically equalize transmission loads among a plurality of broadcast origination points in a digital broadcast transmission system for wireless delivery of digital content from a host computer system to a plurality of client computer systems, comprising:

receiving content requested by at least one of the client computer systems;

transmitting a first digital broadcast transmission from a selected one of the plurality of broadcast origination points to at least one of the client computer systems, the digital broadcast including at least the requested content;

receiving transmission information about one or more of the plurality of broadcast origination points; and

transmitting a second digital broadcast transmission from the selected broadcast origination point to one or more of the client computer systems, the second digital broadcast transmission including a beacon signal that provides transmission information about one or more of the plurality of broadcast origination points to permit a client computer system to select a broadcast origination point, whereby transmission loads may be dynamically and automatically equalized among said plurality of broadcast origination points.

### 51. (new) The method of Claim 50 wherein:

said requested content is received from the Internet; and

said transmission information comprises a reported null packet count for one or more of said broadcast origination points, said reported null packet count reflecting information about a broadcast capacity of a broadcast origination point.

### 52. (new) The method of Claim 50 further comprising:

transmitting a third digital broadcast transmission comprising at least one special action instruction, said at least one special action instruction comprising a vacate instruction that instructs one or more of the client computer systems to stop listening to one of the plurality of



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broadcast origination points and to identify a different one of the plurality of broadcast origination points to start listening to.

### 53. (new) The method of Claim 50, further comprising:

addressing said beacon signal such that the beacon signal is intended to be read by only a subset of the client computers.

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## 54. (new) The method of Claim 50, further comprising:

receiving from said host computer system a suggested broadcast origination point for one or more of the client computer systems; and

transmitting said suggested broadcast origination point to said one or more of the client computer systems, whereby the host computer can direct the provisioning of the plurality of broadcast origination points, and whereby one or more client computer systems can select a new broadcast origination point without receiving a beacon signal from said selected one of the plurality of broadcast origination points.

# 55. (new) A method for providing Internet access to a client computer system, comprising:

providing a digital broadcast transmission system for wireless delivery of digital content to said client computer system, said digital broadcast transmission system including at least first and second broadcast origination points;

providing a host computer system connected to said digital broadcast transmission system;

establishing a communication connection between said host computer system and said client computer system;

delivering a request for content from said client computer system to said host computer system;

obtaining delivery of requested content via the Internet to said host computer system;

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transferring said requested content to a selected one of said first and second broadcast origination points; and

receiving a digital broadcast transmission at said client computer system from said first or second broadcast origination point, said digital broadcast including said requested content.

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56. (new) The method of claim 55 wherein:

said digital broadcast transmission includes a beacon signal that provides transmission characteristics of said digital broadcast origination points.

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# **CLEAN COPY OF NEW CLAIMS**

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21. (new) A host computer system for balancing a transmission load among a plurality of

broadcast origination points in a digital broadcast transmission system for wireless delivery of

digital content to a plurality of client computer systems, the system comprising:

a load balancing module for selecting one of the plurality of broadcast origination

points for broadcasting content to at least one of the plurality of client computer systems; and

a host server programmed to receive one or more requests for content from at

least one of the plurality of client computer systems, to retrieve the requested content, and to

transmit the requested content to at least the selected one of the plurality of broadcast origination

points.

22. (new) The system of Claim 21, further comprising:

at least one router located between the host server and the plurality of broadcast

origination points for receiving requested content from the host server and routing the requested

content to at least the selected one of the plurality of broadcast origination points for broadcast to

at least one of the plurality of client computer systems.

23. (new) The system of Claim 21, further comprising:

a communications link between the host server and the Internet for retrieving

content requested by at least one of the plurality of client computer systems.

24. (new) A method for balancing a transmission load among a plurality of broadcast

origination points in a digital broadcast transmission system for wireless delivery of digital

content to a plurality of client computer systems, comprising:

providing a host computer system that is in communication with the digital

broadcast transmission system;

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establishing a communication connection between the host computer system and one of the client computer systems;

receiving a request for content from said one of the plurality of client computer systems;

obtaining the requested content;

selecting one of the plurality of broadcast origination points;

transferring the requested content from the host computer system to the selected one of the plurality of broadcast origination points; and

causing a digital broadcast to be transmitted by the selected one of the plurality of broadcast origination points to said one of the plurality of client computer systems, said digital broadcast including at least the requested content.

### 25. (new) The method of claim 24 wherein:

said host computer system includes a host server and a router.

### 26. (new) The method of Claim 24 wherein:

said digital broadcast further includes at least one special action instruction.

# 27. (new) The method of Claim 24 further comprising:

including a vacate instruction in said digital broadcast that instructs one or more of the client computer systems to stop listening to one of the plurality of broadcast origination points and to identify a different one of the plurality of broadcast origination points to start listening to; and

receiving a routing information update from one of the client computer systems, said routing information update requesting future digital broadcasts from the identified different one of the plurality of broadcast origination points.

# 28. (new) The method of Claim 27 further comprising:

updating a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the identified different one of the plurality of broadcast origination points.

#### 29. (new) The method of Claim 24 wherein:

said digital broadcast further comprises a beacon signal that provides transmission characteristics for one or more of the broadcast origination points; and

said characteristics comprise bandwidth availability data for one or more of the digital broadcast origination points.

### 30. (new) The method of Claim 29 further comprising:

including a reported null packet count for one or more of said broadcast origination points in said bandwidth availability data; and

receiving a routing information update from one of the client computer systems, said routing information update requesting future digital broadcasts from one of the plurality of broadcast origination points having a higher reported null packet count than the selected one of the broadcast origination points.

### 31. (new) The method of Claim 30 further comprising:

updating a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the broadcast origination point having a higher reported null packet count than the selected one of the broadcast origination points.

### 32. (new) The method of Claim 29 wherein:

said beacon signal is encoded such that the beacon signal is intended to be read by only a subset of the client computer systems.

### 33. (new) The method of Claim 32 wherein:

the beacon signal is addressed for a subset of the plurality of client computer systems, at least one of which in the subset is positioned to receive transmissions from two or more broadcast origination points.

### 34. (new) The method of Claim 29, wherein:

said beacon signal includes a suggested broadcast origination point for at least one of the client computer systems.

### 35. (new) The method of claim 24 wherein:

said digital broadcast transmission comprises a digital television signal in compliance with an Advanced Television Standards Committee (ATSC) format and wherein the requested content is inserted in place of null packets in said ATSC formatted digital television signal.

### 36. (new) The method of claim 24 wherein:

said communication connection between the host computer system and the client computer system comprises an IP virtual private networking connection.

### 37. (new) The method of claim 24 wherein:

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at least one of the plurality of broadcast origination points comprises a selected

one of a terrestrial digital television transmission station and a digital broadcast satellite

transponder.

38. (new) The method of claim 24 wherein:

said plurality of broadcast origination points comprises a selected one of a

plurality of channels on a single transmission station and a plurality of separate transmission

stations.

39. (new) The method of claim 24 wherein:

said host computer system is connected to said selected one of the plurality of

broadcast origination points via a selected one of a wireless microwave transmission link and a

wired transmission link.

40. (new) A method for selecting a broadcast origination point in a digital broadcast

transmission system for wireless delivery of digital content to a client computer system, said

digital broadcast system comprising a host computer system and a plurality of broadcast

origination points, the method comprising:

establishing a communication connection between said client computer system

and said host computer system;

transmitting a request for content to said host computer system;

providing the client computer system with a digital broadcast receiver;

receiving a digital broadcast transmitted by a selected one of the plurality of

broadcast origination points at the digital broadcast receiver, said digital broadcast including at

least the requested content; and

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receiving a beacon signal from one of the plurality of broadcast originating points at the digital broadcast receiver, said beacon signal providing transmission characteristics of said plurality of broadcast origination points.

#### 41. (new) The method of Claim 40 wherein:

said requested content is received from the Internet by the host computer system and forwarded to the selected one of said plurality of broadcast origination points.

### 42. (new) The method of Claim 40 further comprising:

receiving at least one special action instruction in said digital broadcast; said at least one special action instruction comprising a vacate instruction that instructs one or more of the client computer systems to stop listening to one of the plurality of broadcast origination points and to identify a different one of the plurality of broadcast origination points to start listening to;

updating a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the identified broadcast origination point.

#### 43. (new) The method of Claim 42 wherein:

said host computer system comprises a server and a router; and said step of updating a routing information record comprises transmitting a routing information update to a selected one of the server and the router.

# 44. (new) The method of Claim 40 further comprising:

receiving bandwidth availability data for one or more of said digital broadcast origination points in said characteristics;

generating a routing information update, said routing information update requesting future digital broadcasts from an identified one of the plurality of broadcast origination points, the identity of which is selected based on the bandwidth availability data; and

transmitting the routing information update to the host computer system to update a routing information record to ensure future digital broadcasts to said one of the client computer systems are made via the identified broadcast origination point.

#### 45. (new) The method of Claim 44 wherein:

said bandwidth availability data includes a reported null packet count for one or more of said broadcast origination points.

#### 46. (new) The method of Claim 44 wherein:

said beacon signal is addressed to a subset of a client computer systems to limit the number of client computer systems that may change broadcast origination points at a given time.

### 47. (new) The method of Claim 40 further comprising:

receiving at least one of error information and signal strength information for one or more of the digital broadcast origination points in said characteristics.

adjusting the digital broadcast receiver to receive a digital transmission from one or more of the plurality of digital broadcast origination points;

determining whether digital broadcast signals are being received at said digital broadcast receiver from a digital broadcast origination point for which at least one of (1) the received error information is below a first predetermined threshold and (2) the received signal strength information is above a second predetermined threshold; and

prompting a user of said client computer system to adjust a digital receiver antenna if digital broadcast signals are not being received from one or more digital broadcast

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origination points for which at least one of (1) the received error information is below a first predetermined threshold and (2) the received signal strength information is above a second predetermined threshold.

48. (new) The method of Claim 47 wherein:

said at least one of received error information and received signal strength information is collected by one or more client computer systems and transmitted to said host computer system for transmission to others of the plurality of client computer systems.

49. (new) The method of Claim 45, wherein:

said beacon signal includes a suggested broadcast origination point for at least one of said client computer systems to enable said at least one client computer system to select a new broadcast origination point without receiving a beacon signal from said selected one of the plurality of broadcast origination points.

50. (new) A method for provisioning bandwidth to dynamically and automatically equalize transmission loads among a plurality of broadcast origination points in a digital broadcast transmission system for wireless delivery of digital content from a host computer system to a plurality of client computer systems, comprising:

receiving content requested by at least one of the client computer systems;

transmitting a first digital broadcast transmission from a selected one of the plurality of broadcast origination points to at least one of the client computer systems, the digital broadcast including at least the requested content;

receiving transmission information about one or more of the plurality of broadcast origination points; and

transmitting a second digital broadcast transmission from the selected broadcast origination point to one or more of the client computer systems, the second digital broadcast

transmission including a beacon signal that provides transmission information about one or more

of the plurality of broadcast origination points to permit a client computer system to select a

broadcast origination point, whereby transmission loads may be dynamically and automatically

equalized among said plurality of broadcast origination points.

51. (new) The method of Claim 50 wherein:

said requested content is received from the Internet; and

said transmission information comprises a reported null packet count for one or

more of said broadcast origination points, said reported null packet count reflecting information

about a broadcast capacity of a broadcast origination point.

52. (new) The method of Claim 50 further comprising:

transmitting a third digital broadcast transmission comprising at least one special

action instruction, said at least one special action instruction comprising a vacate instruction that

instructs one or more of the client computer systems to stop listening to one of the plurality of

broadcast origination points and to identify a different one of the plurality of broadcast

origination points to start listening to.

53. (new) The method of Claim 50, further comprising:

addressing said beacon signal such that the beacon signal is intended to be read by

only a subset of the client computers.

54. (new) The method of Claim 50, further comprising:

receiving from said host computer system a suggested broadcast origination point

for one or more of the client computer systems; and

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transmitting said suggested broadcast origination point to said one or more of the client computer systems, whereby the host computer can direct the provisioning of the plurality of broadcast origination points, and whereby one or more client computer systems can select a new broadcast origination point without receiving a beacon signal from said selected one of the plurality of broadcast origination points.

# 55. (new) A method for providing Internet access to a client computer system, comprising:

providing a digital broadcast transmission system for wireless delivery of digital content to said client computer system, said digital broadcast transmission system including at least first and second broadcast origination points;

providing a host computer system connected to said digital broadcast transmission system;

establishing a communication connection between said host computer system and said client computer system;

delivering a request for content from said client computer system to said host computer system;

obtaining delivery of requested content via the Internet to said host computer system;

transferring said requested content to a selected one of said first and second broadcast origination points; and

receiving a digital broadcast transmission at said client computer system from said first or second broadcast origination point, said digital broadcast including said requested content.

### 56. (new) The method of claim 55 wherein:

said digital broadcast transmission includes a beacon signal that provides transmission characteristics of said digital broadcast origination points.